Amendments to the Claims:

Claims 31, 33, 34, 40, 42-45, 47 and 48 have been amended herein. Claims 36-38, 41 and 46 have been canceled. New claims 51 and 52 are added. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-30 (Canceled)

31. (Currently Amended) A method of reducing oxidation of an electrically conductive material, comprising:

forming a first dielectric layer on a semiconductor structure, the first dielectric layer comprising a depression therein;

filling the depression with an unoxidized electrically conductive material;

reacting ~~a chemical composition~~ <u>ammonia, diatomic nitrogen, or nitrogen-containing silane</u> with an upper surface of the electrically conductive material to protect the upper surface from oxidation and to form a chemical compound more resistant to oxidation than the electrically conductive material; and

forming a second dielectric layer over the electrically conductive material and the first dielectric layer and adhering the second dielectric layer to the electrically conductive material, wherein reacting the chemical composition and forming the second dielectric layer occur simultaneously.

32. (Previously Presented) The method of claim 31, wherein filling the depression with the electrically conductive material comprises filling the depression with a refractory metal.

33. (Currently Amended) The method of claim 31, wherein reacting the ~~chemical composition~~ ammonia, diatomic nitrogen or nitrogen-containing silane with the upper surface of the electrically conductive material comprises reacting the ~~chemical composition~~ ammonia, diatomic nitrogen or nitrogen-containing silane with at least one monolayer of the upper surface of the electrically conductive material.

34. (Currently Amended) A method of reducing oxidation of an electrically conductive material, comprising:

forming a first dielectric layer on a semiconductor structure, the first dielectric layer comprising a depression therein;

filling the depression with an unoxidized electrically conductive material;

reacting a nitrogen-containing composition with an upper surface of the electrically conductive material to form a chemical compound more resistant to oxidation than the electrically conductive material; and

forming a second dielectric layer over the electrically conductive material and the first dielectric layer and adhering the second dielectric layer to the electrically conductive material, wherein reacting ~~a chemical~~ the chemical composition and forming the second dielectric layer occur simultaneously.

35. (Previously Presented) The method of claim 34, wherein reacting the nitrogen-containing composition with the upper surface of the electrically conductive material comprises exposing the upper surface of the electrically conductive material to the nitrogen-containing composition for a period of time less than or equal to approximately 30 seconds.

36-39. (Canceled)

40. (Currently Amended) A method of reducing oxidation of an electrically conductive material, comprising:

forming a dielectric layer on a semiconductor structure, the dielectric layer comprising a depression therein;

filling the depression with an unoxidized electrically conductive material;

adsorbing a ~~chemical~~ nitrogen-containing composition onto an upper surface of the electrically conductive material to passivate the upper surface and to form a chemical compound more resistant to oxidation than the electrically conductive material; and

forming a second dielectric layer over the electrically conductive material and the first dielectric layer and adhering the second dielectric layer to the electrically conductive material such that the second dielectric layer substantially absorbs the chemical compound.

41. (Canceled)

42. (Currently Amended) The method of claim 40, wherein adsorbing the ~~chemical~~ nitrogen-containing composition onto the upper surface of the electrically conductive material comprises adsorbing ammonia, diatomic nitrogen, or nitrogen-containing silane onto the upper surface of the electrically conductive material.

43. (Currently Amended) The method of claim 40, wherein adsorbing the ~~chemical~~ nitrogen-containing composition onto the upper surface of the electrically conductive material comprises forming an adsorbed complex of a nitrogen-containing composition onto the upper surface.

44. (Currently Amended) The method of claim 40, wherein adsorbing the ~~chemical~~ nitrogen-containing composition onto the upper surface of the electrically conductive material comprises ~~providing a nitrogen-containing composition,~~ heating the dielectric layer to a temperature of less than or equal to approximately 400°C, and exposing the upper surface to the nitrogen-containing composition to form the chemical compound.

45. (Currently Amended) A method of reducing oxidation of an electrically conductive material, comprising, comprising:

reacting a ~~chemical~~ nitrogen-containing composition with at least one monolayer of an upper surface of an unoxidized electrically conductive material to form a passivation layer; and

adhering a dielectric layer to the electrically conductive material such that the passivation layer is substantially absorbed by the dielectric layer.

46. (Canceled)

47. (Currently Amended) The method of claim 45, wherein reacting the ~~chemical~~ nitrogen-containing composition with at least one monolayer of the upper surface of the electrically conductive material comprises reacting ammonia, diatomic nitrogen, or nitrogen-containing silane with the at least one monolayer of the upper surface of the electrically conductive material.

48. (Currently Amended) The method of claim 45, wherein reacting the ~~chemical~~ nitrogen-containing composition with at least one monolayer of the upper surface of the electrically conductive material comprises forming a nitride of a refractory metal of the electrically conductive material on the upper surface or forming an adsorbed complex of a nitrogen-containing composition on the upper surface.

49. (Original) The method of claim 34, wherein filling the depression with the electrically conductive material comprises filling the depression with a refractory metal.

50. (Original) The method of claim 34, wherein reacting the nitrogen-containing composition with the upper surface of the electrically conductive material comprises reacting the nitrogen-containing composition with at least one monolayer of the upper surface of the electrically conductive material.

51. (New) A method of reducing oxidation of an electrically conductive material, comprising:

forming a first dielectric layer on a semiconductor structure, the first dielectric layer comprising a depression therein;

filling the depression with an unoxidized electrically conductive material;

forming a nitride of a refractory metal on an upper surface of the electrically conductive material or forming an adsorbed complex of a nitrogen-containing composition on the upper surface of the of the electrically conductive material to form a chemical compound more resistant to oxidation than the electrically conductive material; and

forming a second dielectric layer over the electrically conductive material and the first dielectric layer and adhering the second dielectric layer to the electrically conductive material, wherein reacting forming a nitride or forming an adsorbed complex and forming the second dielectric layer occur simultaneously.

52. (New) A method of reducing oxidation of an electrically conductive material, comprising:

forming a first dielectric layer on a semiconductor structure, the first dielectric layer comprising a depression therein;

filling the depression with an unoxidized electrically conductive material;

reacting a chemical composition with an upper surface of the electrically conductive material comprising:

heating the first dielectric layer to a temperature of less than or equal to approximately 400°C; and

exposing the upper surface of the electrically conductive material to a nitrogen-containing composition to form a chemical compound more resistant to oxidation than the electrically conductive material; and

forming a second dielectric layer over the electrically conductive material and the first dielectric layer and adhering the second dielectric layer to the electrically conductive material, wherein reacting the chemical composition and forming the second dielectric layer occur simultaneously.